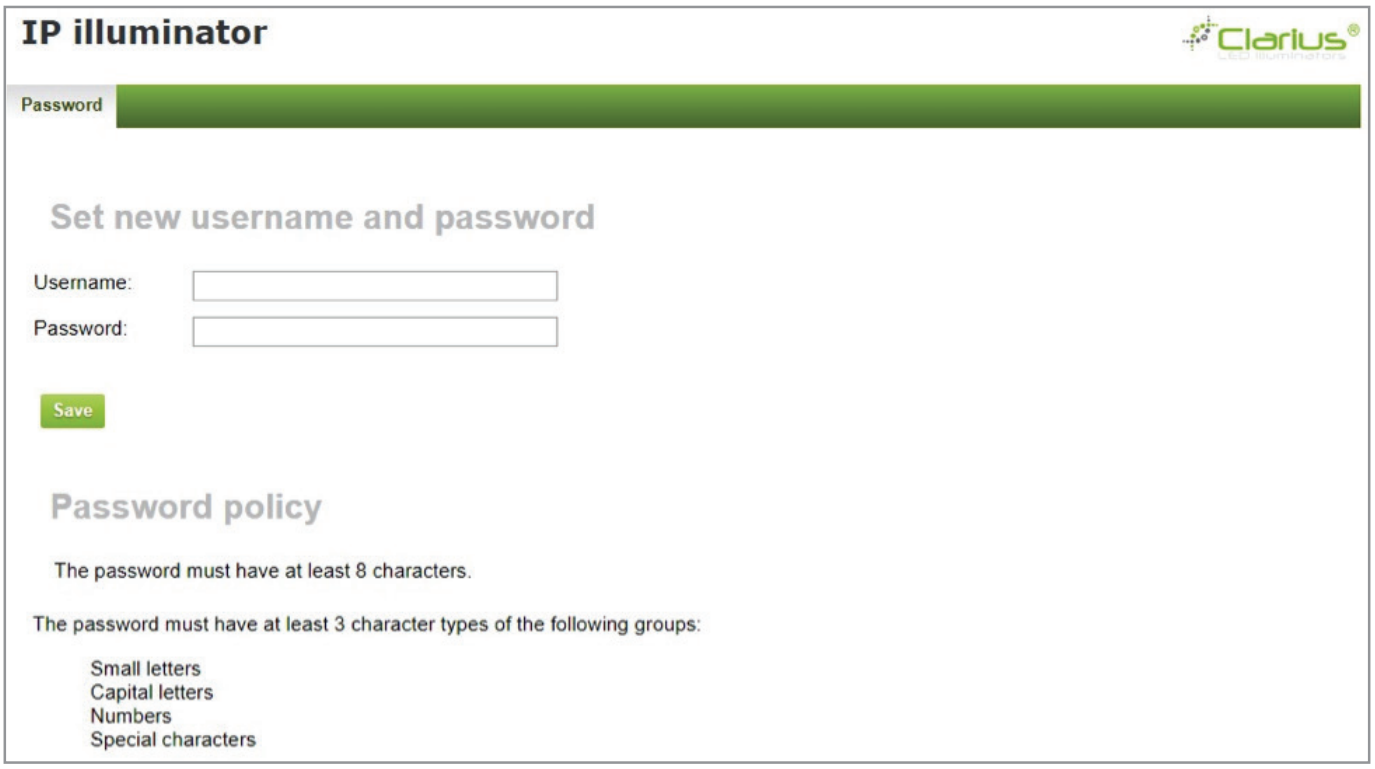
1. Username & Password Set Up

When using the system for the first time, or if a factory reset has been made, the following settings are used:
Product IP number: 192.168.0.10
Subnet mask: 255.255.255.0
Default router: 192.168.0.1

The user must open their web browser and type the illuminator's IP address 192.168.0.10 into the address bar, then press enter to load the user's interface page as shown below:

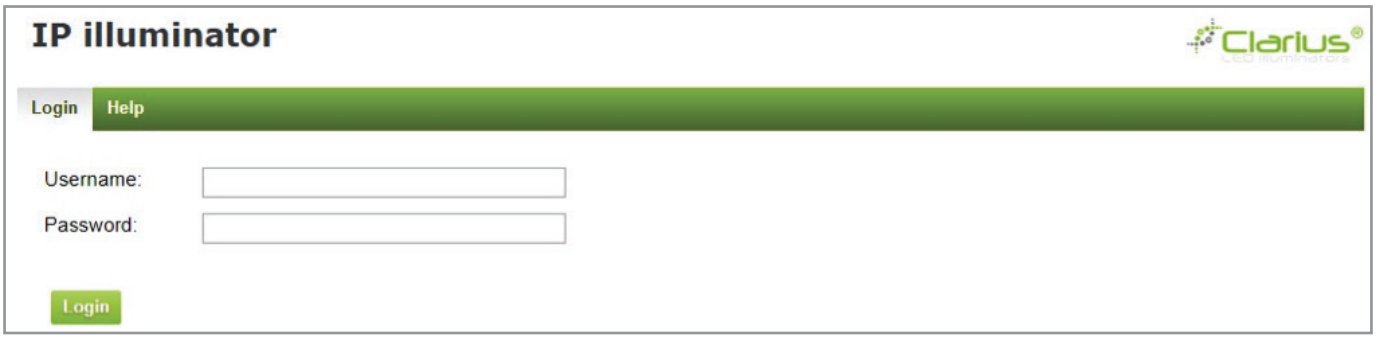


The user will then be prompted to create a username and password based on the password policy.

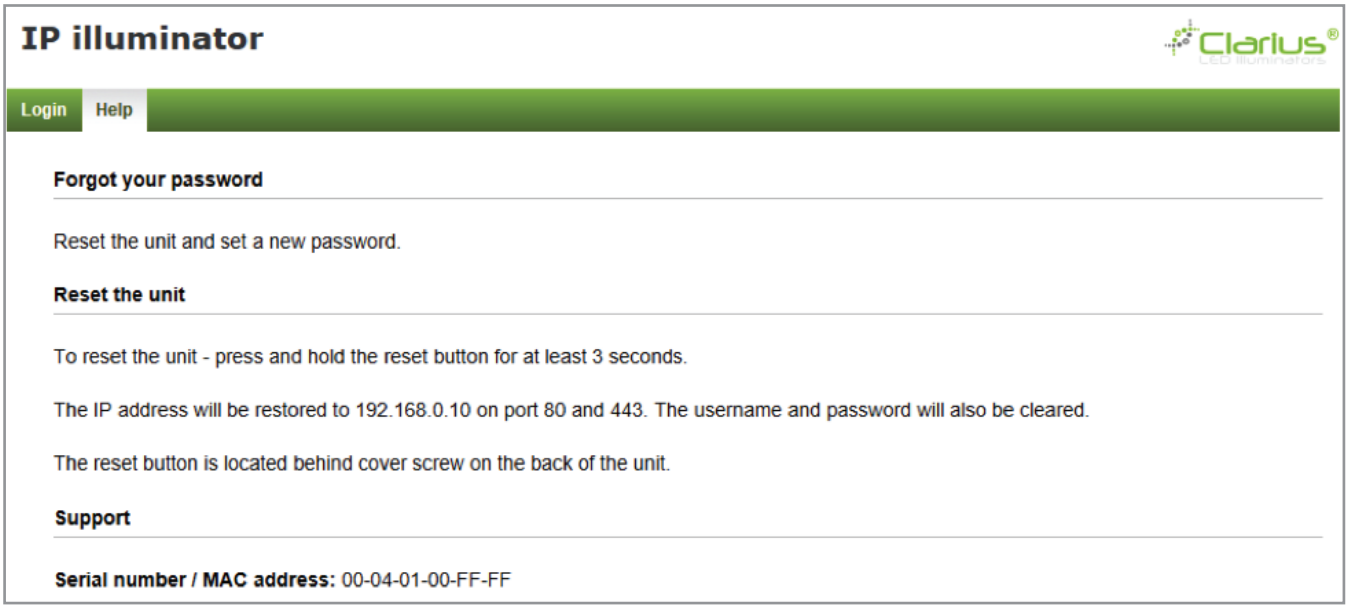
Factory reset
1. Make sure the detector is powered on.
2. Hold down the reset button for 8 seconds.
3. Release reset button, the status LED on the board will turn off for a second.
4. The units IP address and login details are now reset back to factory values.

2. Login

The next time the user wants to login into the illuminator they must open their web browser and type the illuminator's IP address into the address bar, then press to load the user's interface page as shown below. The user must then enter their username and password that they previously created:

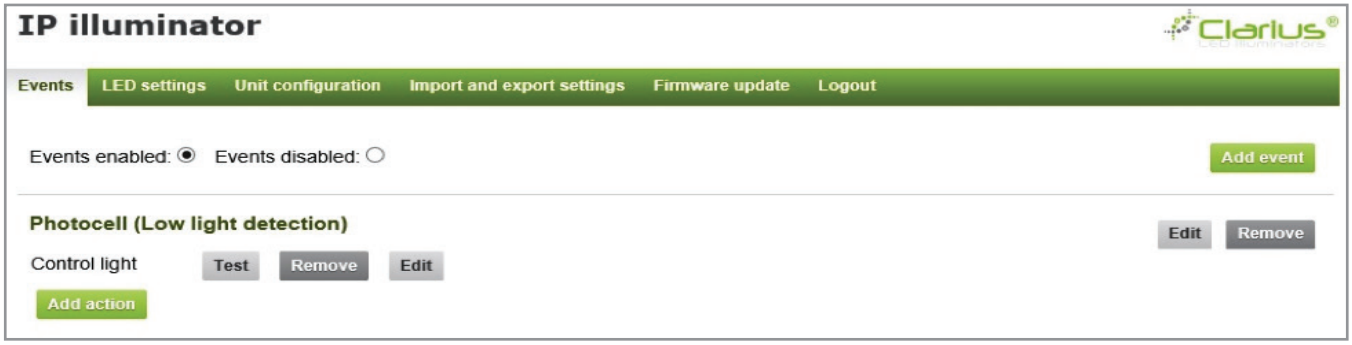


Should the user require help with logging into the illuminator they can select the help tab as shown below and follow the guidance as listed:



3. Events

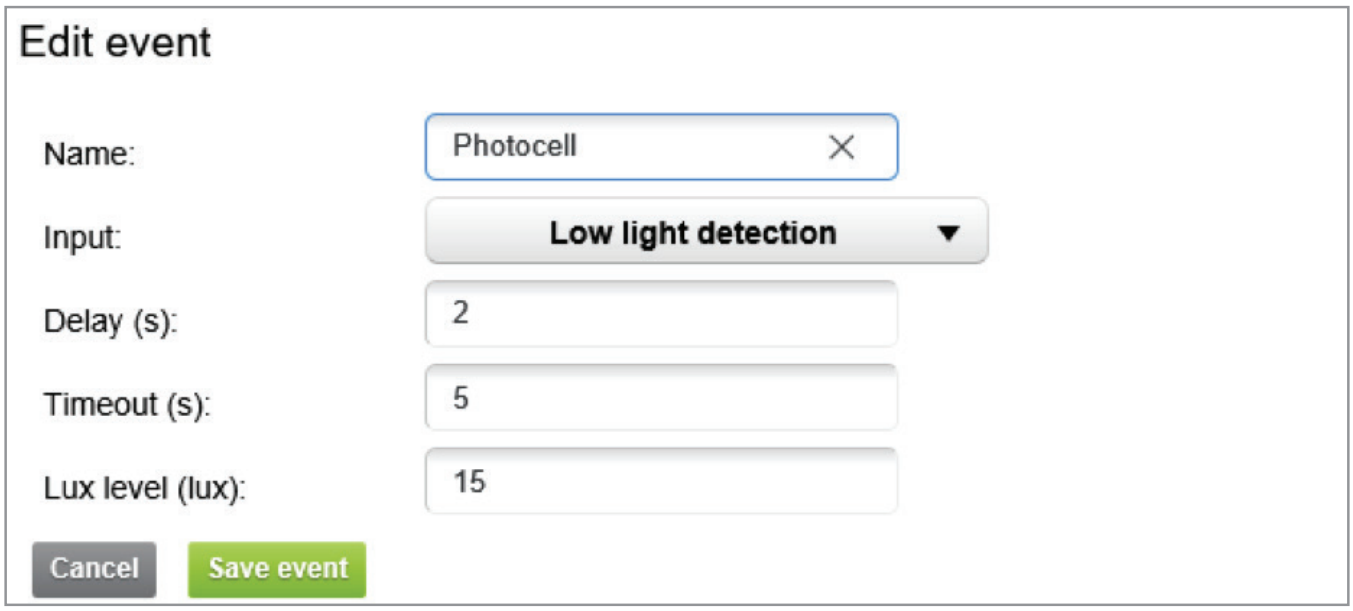
Once logged in the user will be taken to the Events tab as shown below. Events are enabled as default; however, the user can disable events.



The Photocell (Low light detection) event as shown above is pre-programmed into the illuminator, however, this too can be removed by the user if desired by clicking remove on the right-hand side of the screen.

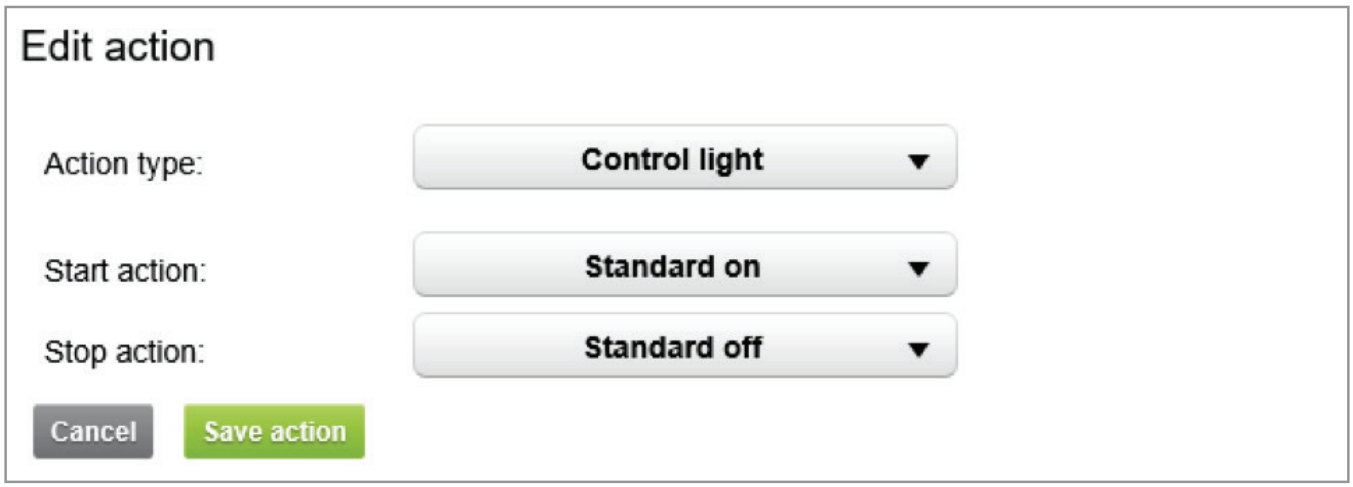
The purpose of Photocell (Low light detection) function is simple, when darkness occurs the illuminator will automatically turn itself on based on its photocell sensor reading and when brightness occurs again the illuminator will turn itself off.

The Photocell (Low light detection) event can be edited by clicking edit on the right-hand side of the screen and the following pop-up screen will appear:



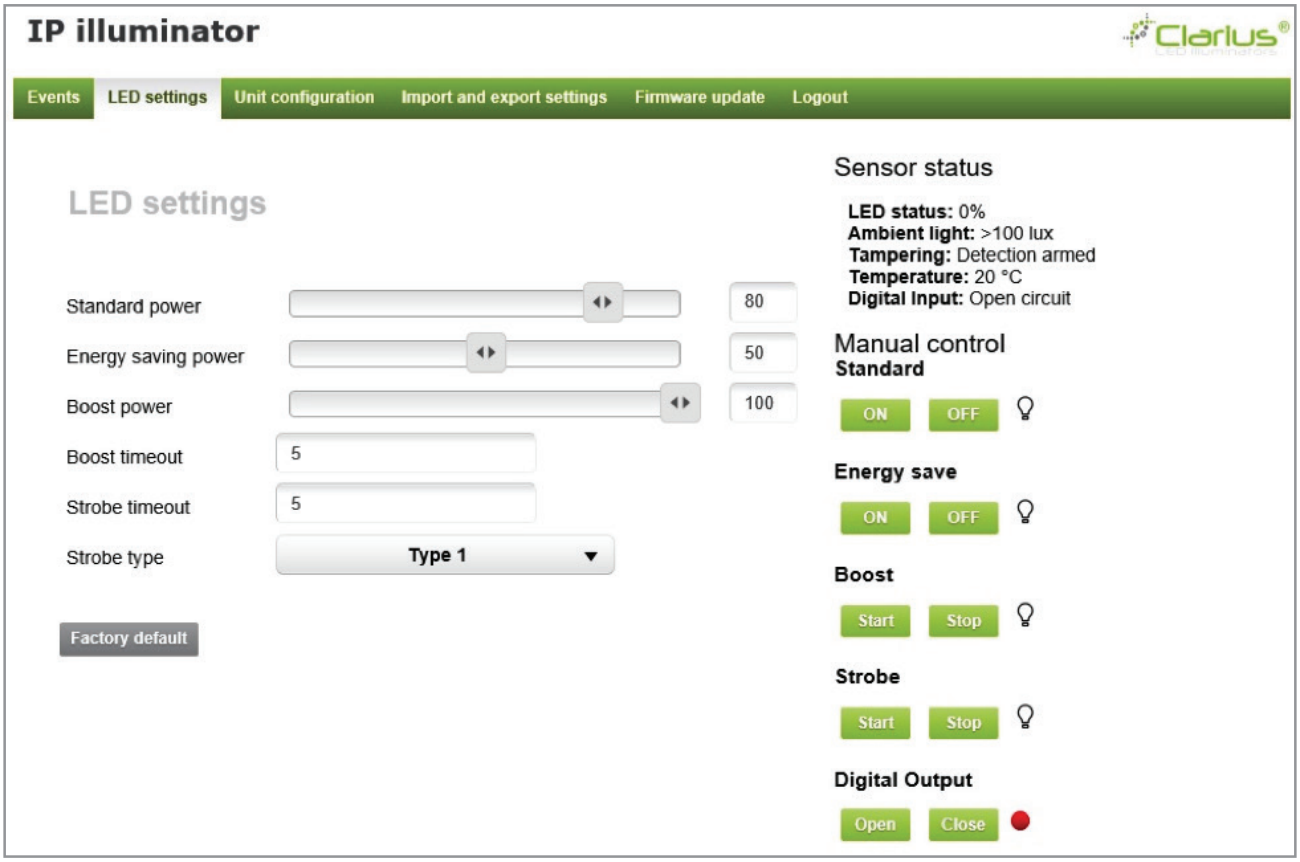
The delay is set to 2 seconds, timeout is set to 5 seconds and lux level to 15 Lux as default. The user can alter these values to suit and then click save event.

The Photocell (Low light detection) action can be edited by clicking edit on the left-hand side of the screen and the following pop-up screen will appear:



4. LED Settings

To set the illuminator's LED power settings the user must select the LED settings tab inside their web browser:



The user can simply reset the illuminator's LED settings by clicking the factory default button as shown above.

Manual Control Standard Function:

The manual control standard function enables the user to be able to turn on/off the illuminator at the given set power value on the slider bar. For example 80% light output as shown below:

Manual Control Energy Save Function:

The manual control energy save function enables the user to be able to turn on/off the illuminator at the given set energy saving power value on the slider bar. For example 50% light output as shown below:

Manual Control Boost Function:

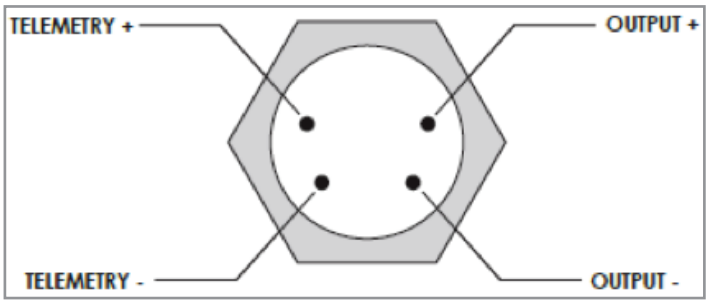
The manual control boost function enables the user to be able to start/stop the illuminator at the given set boost power value on the slider bar. For example 100% light output as shown below for 5 seconds:

Manual Control Strobe Function:

The manual control strobe function enables the user to be able to start/stop the flashing of the LEDs at the given set boost power value on the slider bar. For example 100% light output as shown below for 5 seconds:

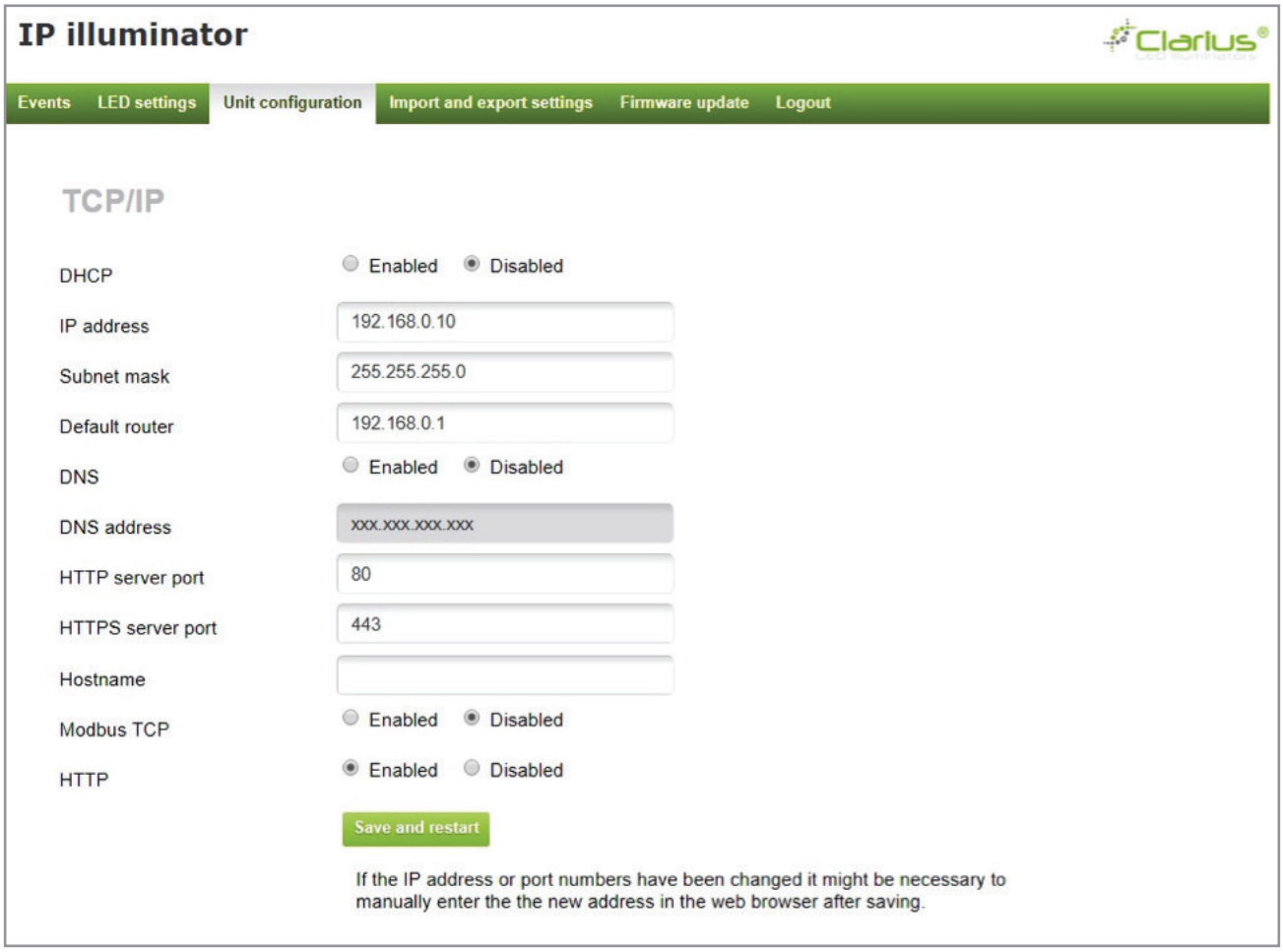
Manual Control Digital Output Function:

The manual control digital output function enables the user to close the output relay pins together as shown in the pin diagram below. A green circle will appear on the screen to indicate this state. To open the relay again, the user simply clicks open on the screen and the red circuit will appear. Initially the illuminator's output is set to open as default.



5. Unit Configuration

To set the illuminator's unit configuration settings the user must select the Unit configuration tab inside their web browser:



The Dynamic Host Configuration Protocol **(DHCP)** is set to disabled as default. The user may enable the **DHCP** to assign a dynamic IP address to the illuminator on the network.

The user can manually set the **IP, Subnet Mask & Router** addresses as desired.

The Domain Name System **(DNS)** protocol is set to disabled as default. The user may enable the **DNS** to convert an alphabetic name into a numerical IP address.

The Hypertext Transfer Protocol **(HTTP)** server port is set to 80 as default.

The Hypertext Transfer Protocol Secure **(HTTPS)** server port is set to 443 as default. **HTTPS** allows information between the browser and the illuminator to be sent encrypted.

The Modbus Transmission Control Protocol **(TCP)** is set to disabled as default. The user may enable the **Modbus TCP** to transmit information over serial lines.

The Hypertext Transfer Protocol **(HTTP)** is set to enabled as default.

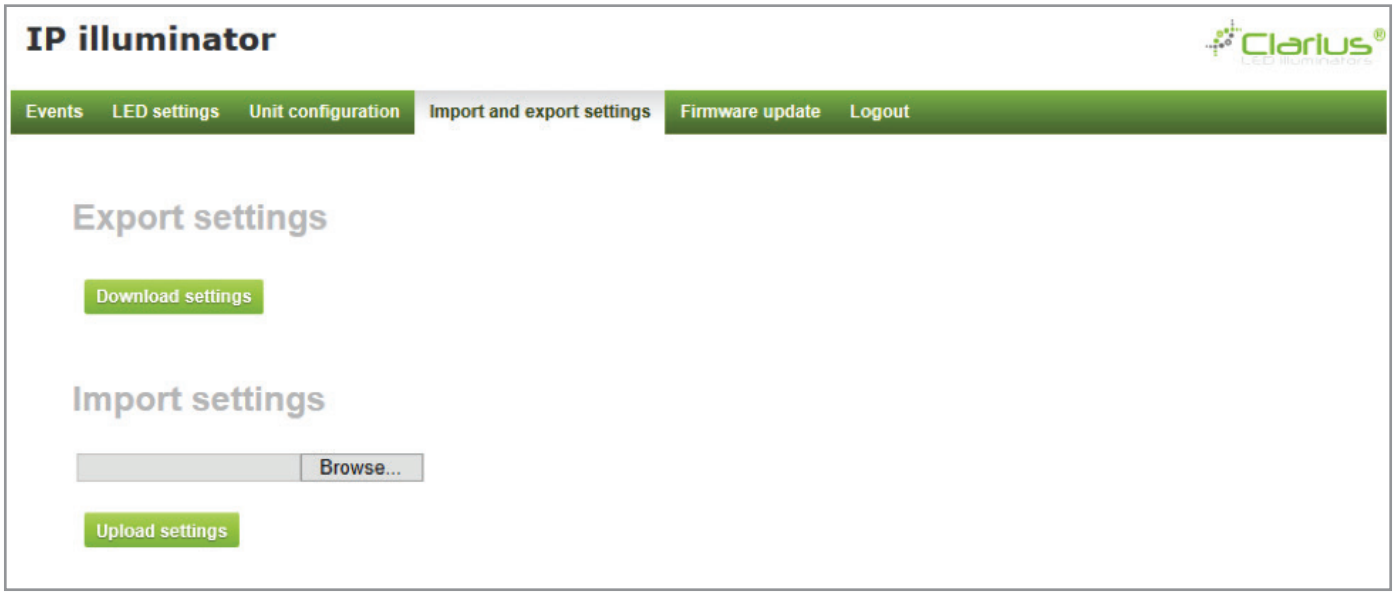
The user should click **save and restart** for any changes to be implemented.

The user can upload a Transport Layer Security (TLS) certificate and private key in the HTTPS certificates section:

The user can change their password in the login section but not username. To change a username the illuminator must be manually reset using the reset button on the spine of the illuminator.

6. Import and Export Settings

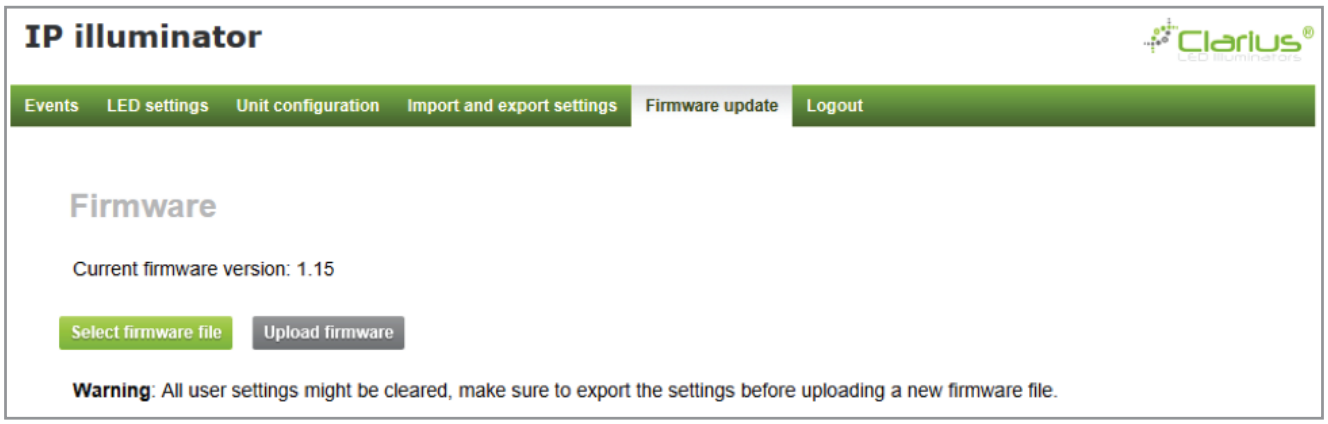
To import and export a given LED illuminator settings the user must select the import and export settings tab inside their web browser:



The user can export settings from a given illuminator by clicking on the download settings button as shown above and saving the settings as a CFG file. The user can then import this file into another illuminator by selecting browse next to the import settings section as shown above and then simply click Upload settings.

7. Firmware Update

To check the illuminator's current firmware version the user must select the Firmware update tab inside their web browser:

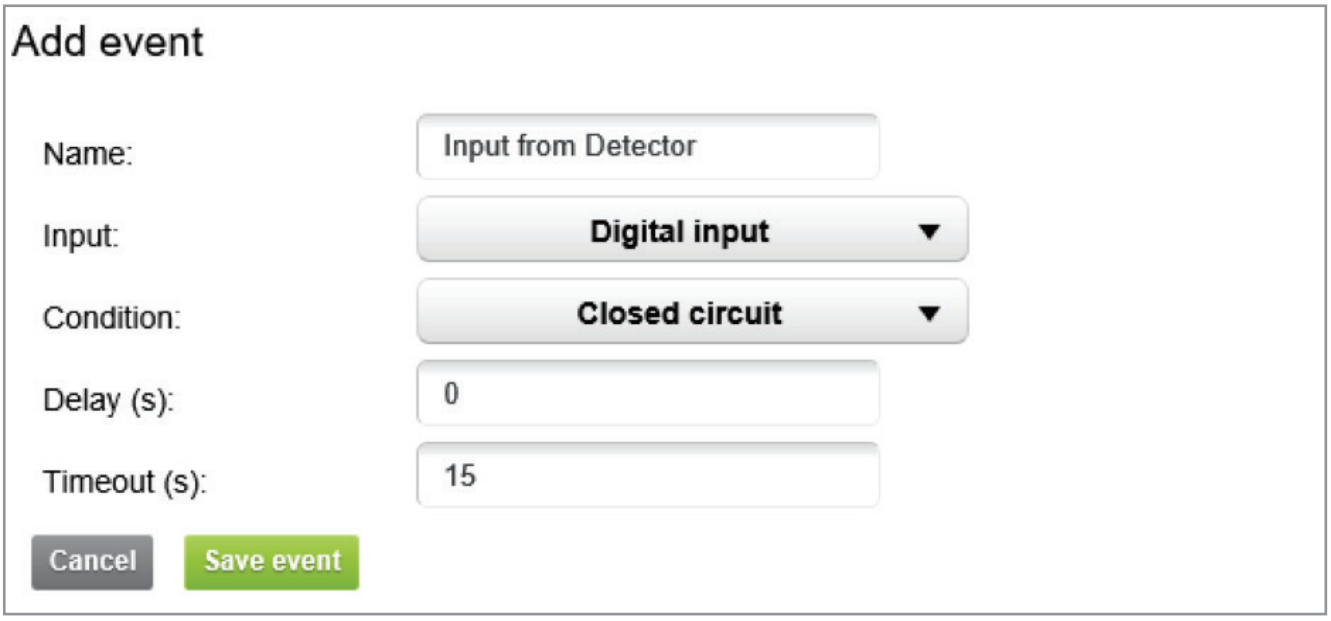


If a new firmware version has been issued by GJD the user will need to click on Select firmware file to select the new firmware file and then click on Upload firmware as shown above.

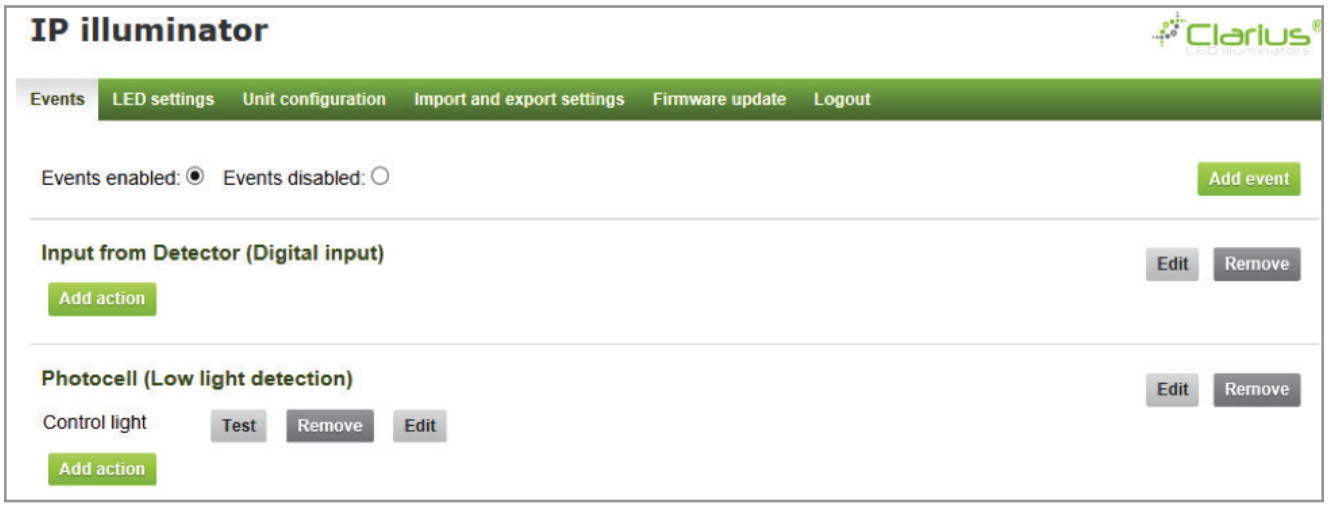
8. Event - Example 1 – Input from Detector

If an external detector is connected to the telemetry input of the illuminator the user can then setup an event to be triggered from that input signal. To do this the user must click Add event on the screen and complete the fields as appropriately.

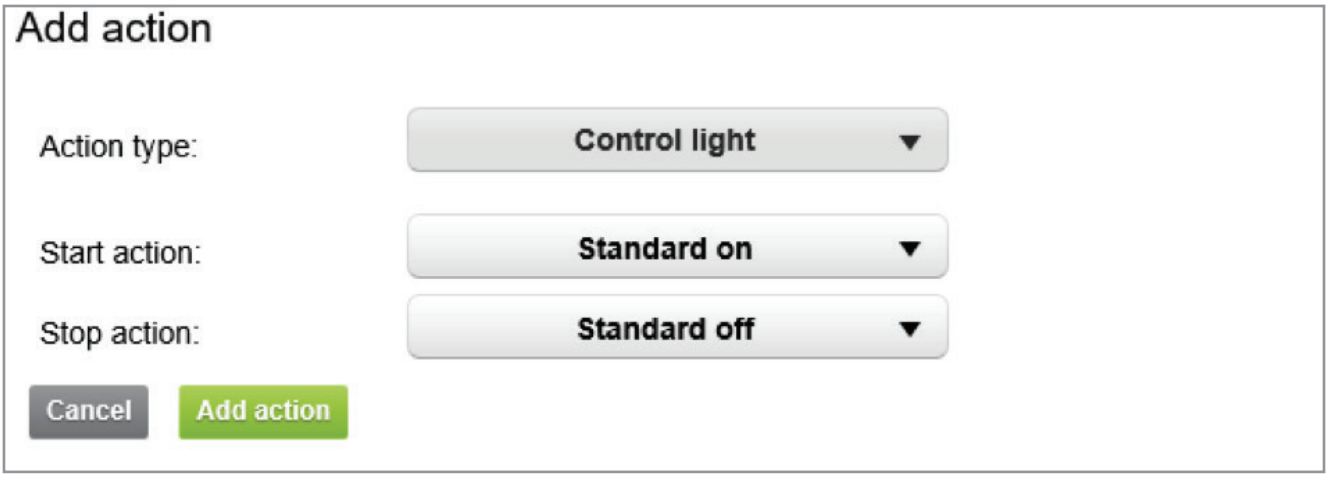
The example below calls the event Input from Detector, the input signal is defined as a Digital input, the condition is Closed circuit which means when the telemetry pins are shorted together the event will be triggered. The delay is set to 0 seconds and the time out is 15 seconds, basically this means the illuminator will be turned on immediately when the digital input signal is received and will remain on for 15 seconds.



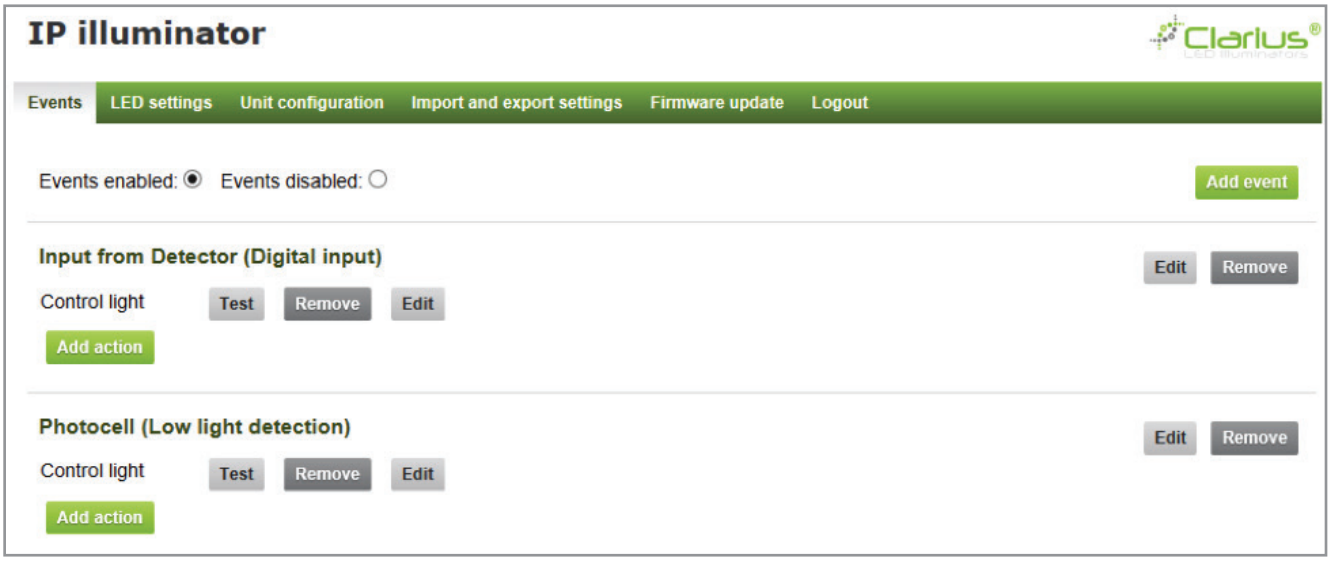
Once the event is saved it will appear as shown below:



The user must then click Add action underneath the input from Detector section. The add action pop-up screen will appear and the user should select Control light for the action type. The start and stop actions should be as shown below:

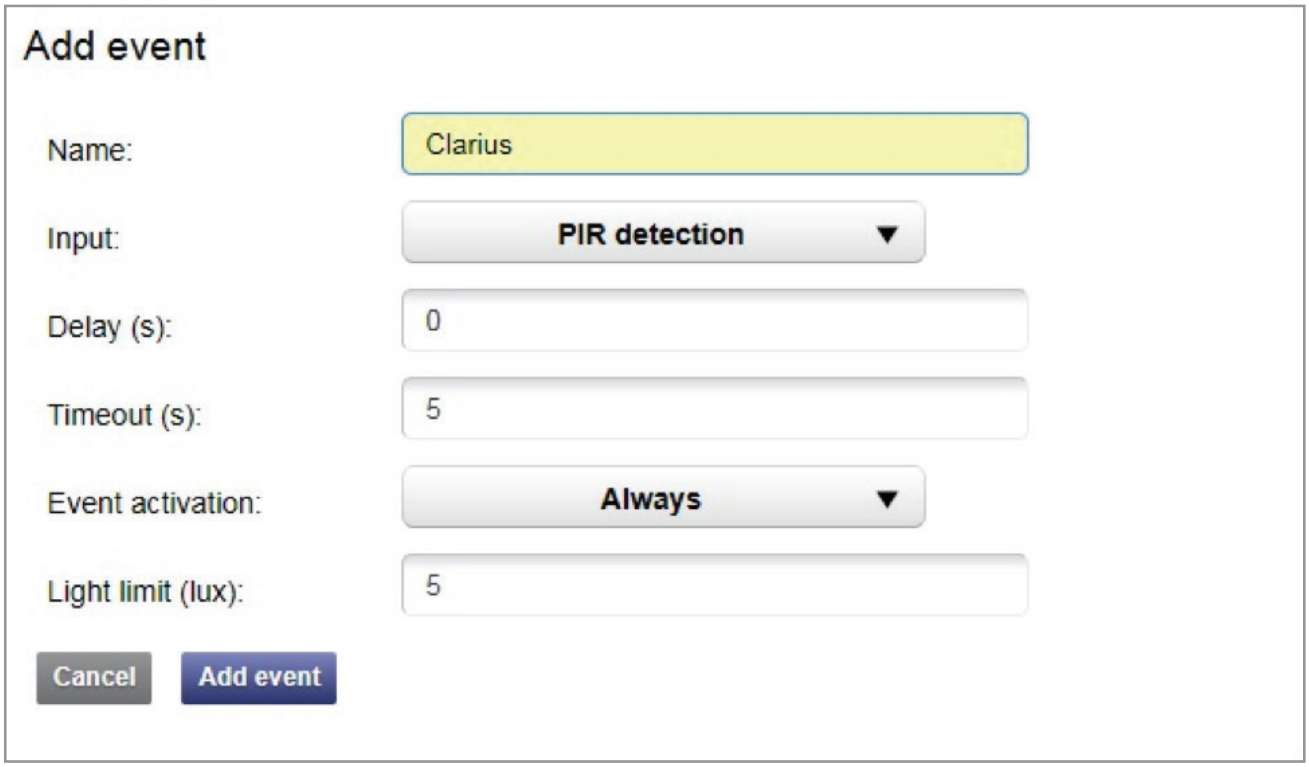


Once Add action is clicked the following screen will appeared to confirm the setup:



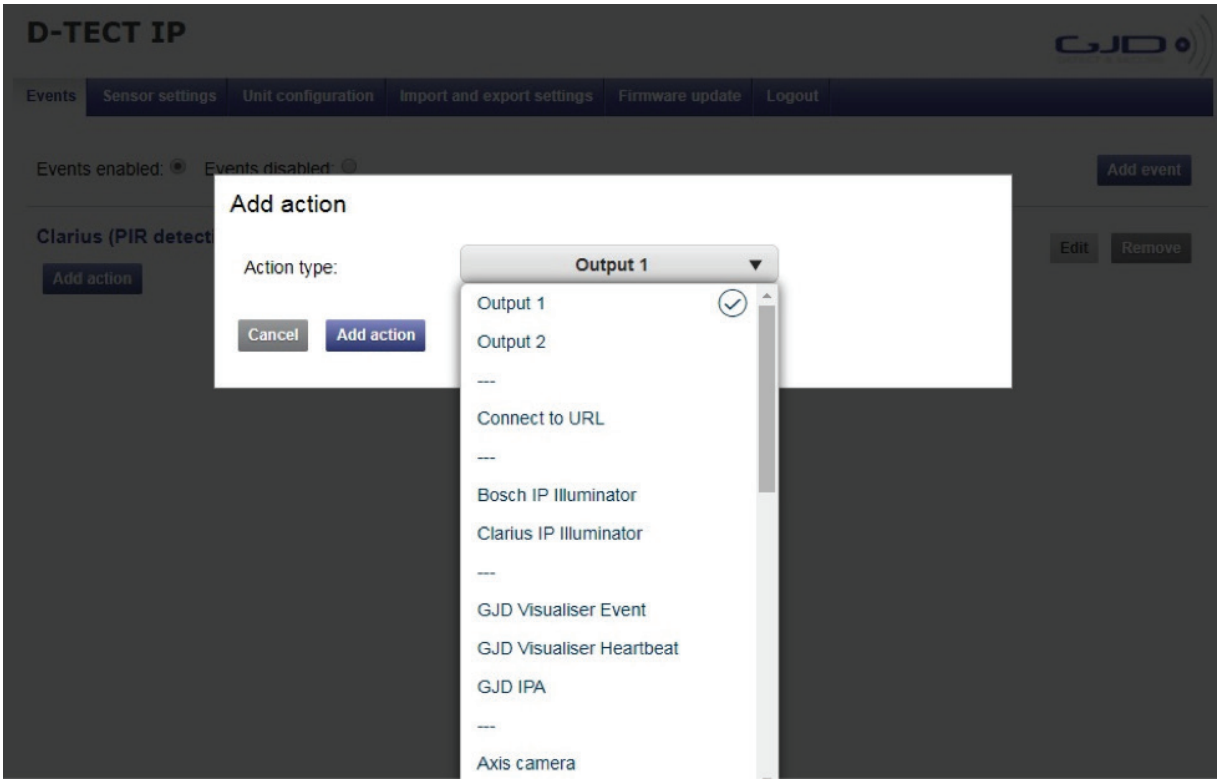
Event - Example 2 – Output from D-TECT IP Detector

In order to connect a D-TECT IP detector to a Clarius Plus IP via an ethernet connection the user needs to log into the D-TECT IP via your browser. Once logged in the user can add the following event:

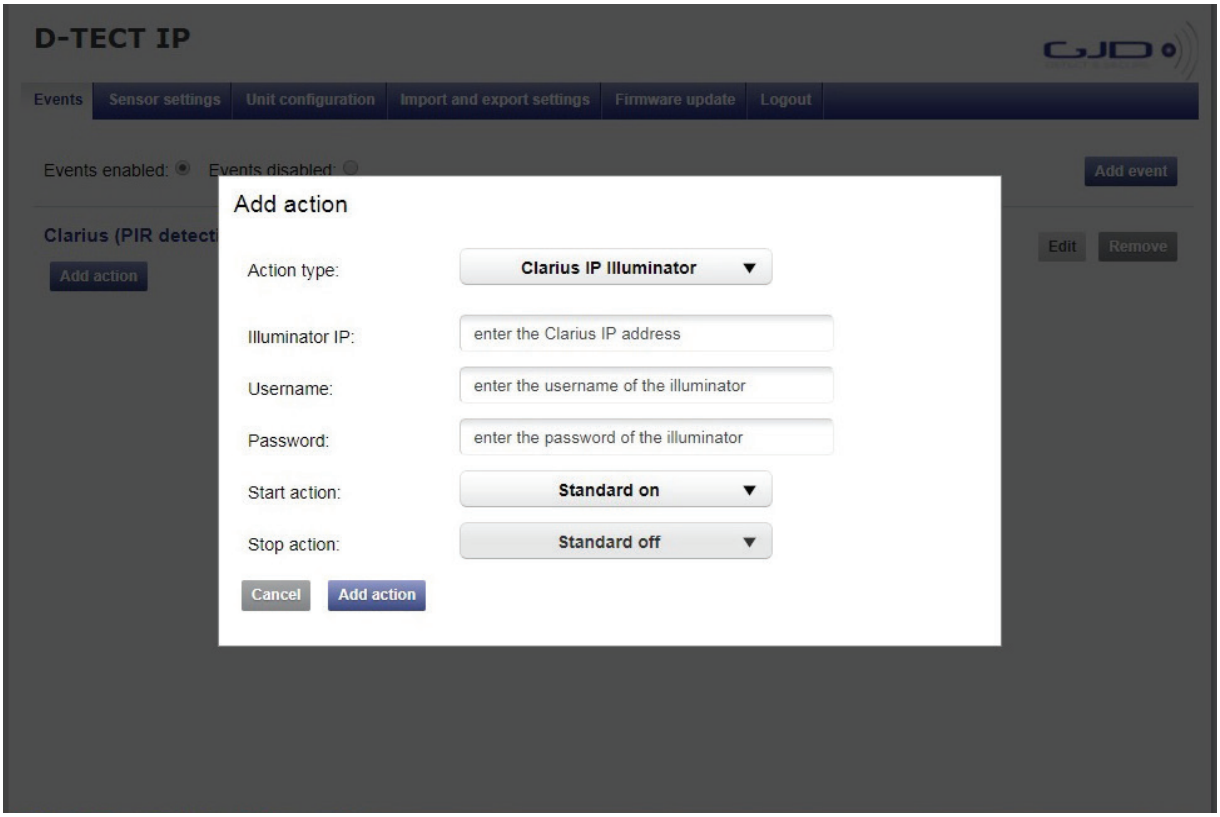


Once the user has added the event it should appear as shown below:

The user should then select Add action, then select Clarius IP Illuminator from the drop down menu:

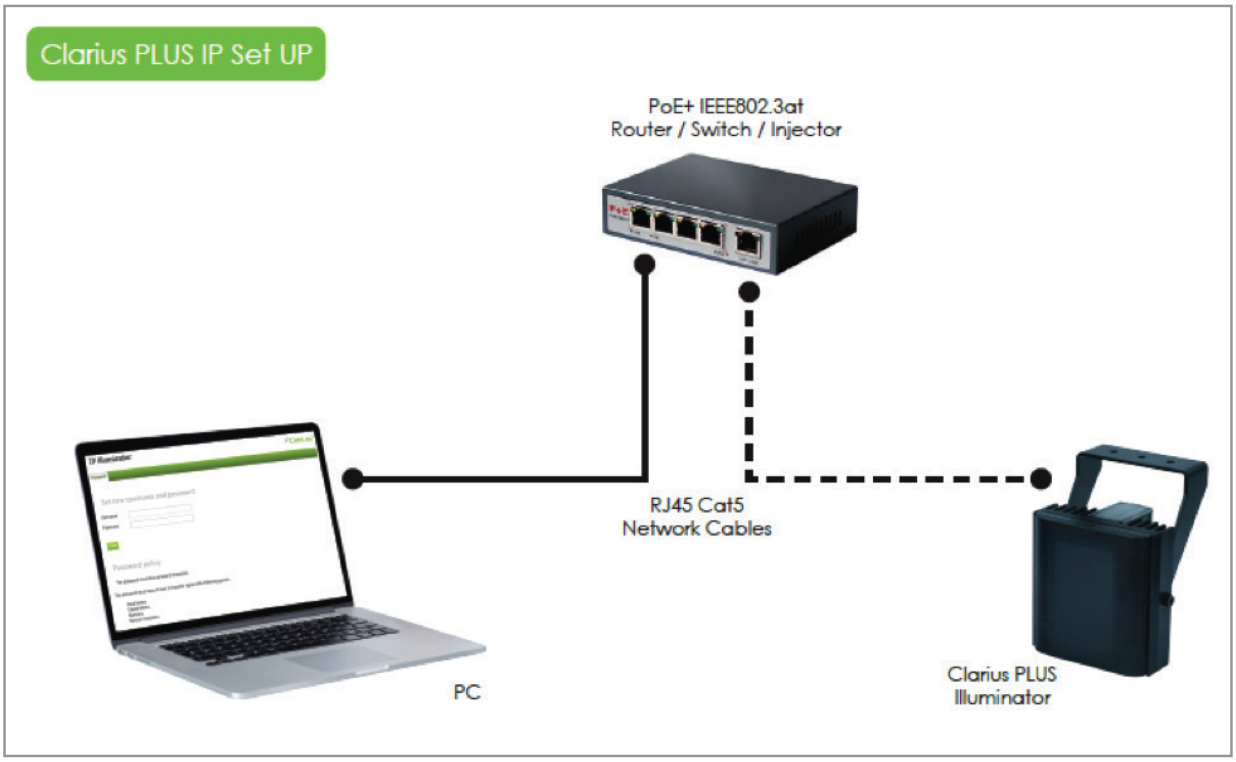


The user should then enter the IP address for the Clarius Plus IP unit, along with its username and password, then press Add action:

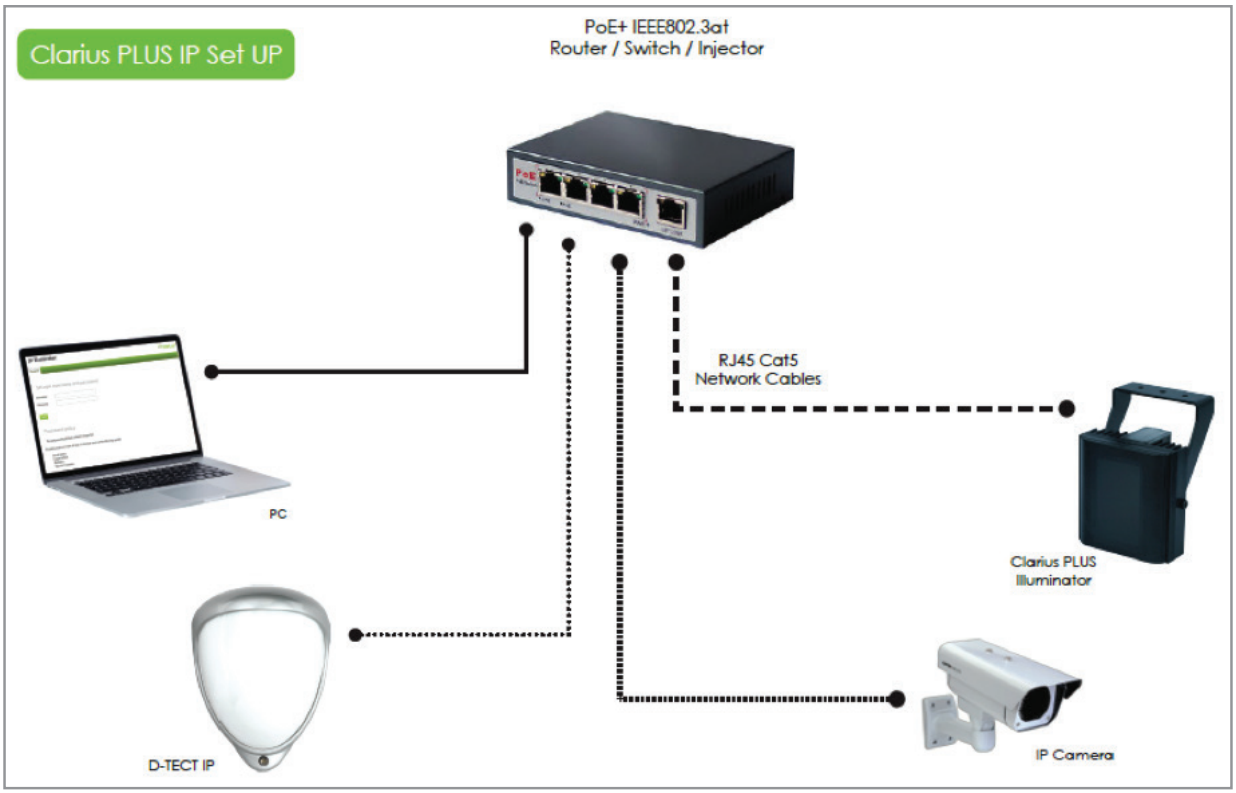


9. Typical Installations

The depiction below illustrates a typical setup for the Clarius Plus IP unit:



The depiction below illustrates a typical setup for the Clarius Plus IP unit, D-TECT IP detector and an IP camera:



10. Trouble Shooting

If you are struggling to connect to your illuminator through your browser, try typing in the first two parts of your own IP address XXX.XXX followed by .0.10:

Product IP number: XXX.XXX.0.10